Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

F50
2

FEDERAL-STATE-PRIVATE
COOPERATIVE SNOW SURVEYS

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY
RECEIVED
NOV 20 1972
PROCUREMENT SECTION
CURRENT SERIAL RECORDS

WATER SUPPLY SUMMARY AND OUTLOOK FOR OREGON

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

AS OF
OCT. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U. S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

FEDERAL-STATE-PRIVATE
COOPERATIVE SNOW SURVEYS

WATER SUPPLY SUMMARY AND OUTLOOK FOR OREGON

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

AS OF

OCT. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

FEDERAL-STATE-PRIVATE
COOPERATIVE SNOW SURVEYS

WATER SUPPLY SUMMARY AND OUTLOOK FOR OREGON

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

AS OF

OCT. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

WATER SUPPLY SUMMARY AND OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

OCTOBER 8, 1972

Issued by

KENNETH E. GRANT
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

A.J. WEBBER
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
PORTLAND OREGON

In Cooperation with

G. BURTON WOOD
DIRECTOR
OREGON AGRICULTURAL
EXPERIMENT STATION

CHRIS L. WHEELER
STATE ENGINEER
STATE OF OREGON

Report prepared by

TOMMY A. GEORGE, Snow Survey Supervisor
and
HOWARD M. VANCE, Assistant Snow Survey Supervisor
SOIL CONSERVATION SERVICE
1218 S W WASHINGTON ST
PORTLAND, OREGON 97205

WATER SUPPLY SUMMARY AND OUTLOOK FOR OREGON

October 1, 1972

Oregon water users have just completed another season with adequate to above normal water supplies. This has been true three out of the last four years. Some irrigators, dependent on direct diversion, experienced some late season shortages as streams dropped off in volume very rapidly in July and August.

This past winter another much-above-average snowpack covered most of the mountains in the state. Record measurements at some snow courses were recorded. Warm weather in March caused much of the snow to melt and run off early. Volume flows were 2 to 4 times normal for the month. Snowmelt runoff continued above average in April and May and then started to drop in June. Lack of precipitation and extremely hot weather during the following two months resulted in below average summer flows.

Soil moisture is currently near average throughout the state. In a few areas soils dried out from the hot August temperature but are starting to return to normal conditions.

Eastern Oregon range conditions generally started out very well but ended up rather poorly due to the dry, hot weather in August. Forage and most crop production was generally good. Heavy late frosts were experienced in the Medford and Hood River areas, resulting in a below normal fruit crop.

Representative streamflow for this past spring and summer, expressed as per cent of average, versus the April 1 forecasts is as follows:

	Period	Obs. Flow	April 1 Forecast
Owyhee net Inflow	April-July	120%	140%
Grande Ronde at La Grande	April-July	117%	110%
Willamette, Mid. Fk. blw. N. Fk.	April-July	123%	126%
Rogue at Raygold	April-July	119%	96%
Upper Klamath Lake	April-Sept.	97%	106%
Chewaucan near Paisley	April-July	98%	92%

Carryover storage in the major irrigation reservoirs is again very good as it has been for the past several years. Stored volumes are slightly below what they were last year at this time. Twenty-four reservoirs contained 1,818,100 acre feet of water on October 1. This is 147% of the average amount of 1,235,200 acre feet.

continued on next page

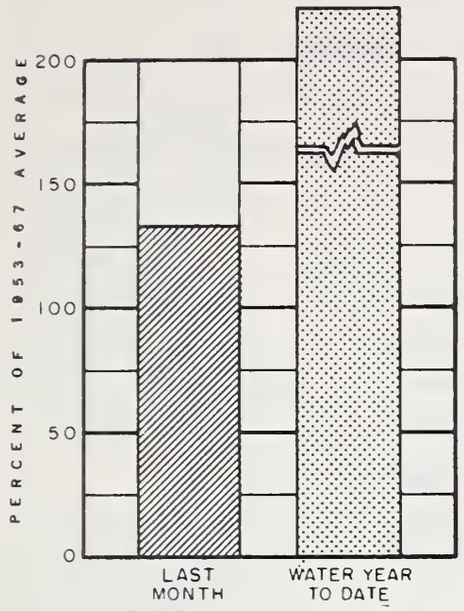
continued -

With the excellent volume of stored water and anothe: average snowpack this next winter, the outlook for next year's water supplies is very good.

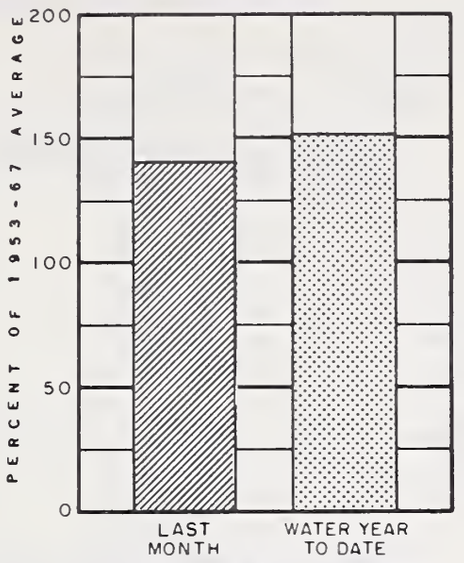
This report contains data furnished by the Oregon State Engineer, the U. S. Geological Survey and N.O.A.A. National Weather Service, and other cooperators.

CURRENT OREGON STREAMFLOW

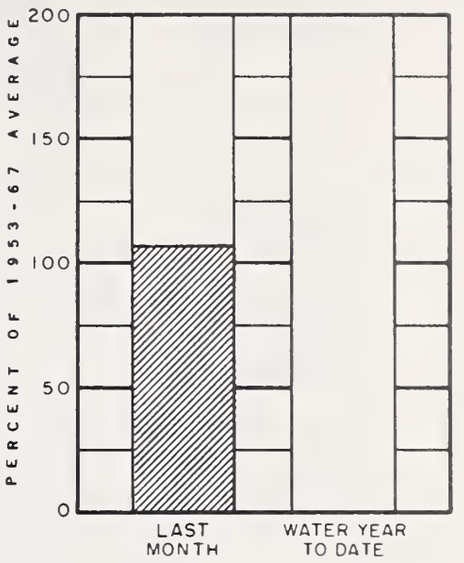
October 1, 1972



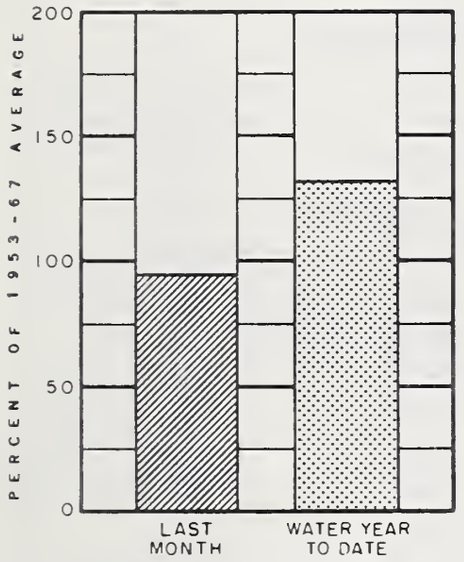
Owyhee Lake net inflow



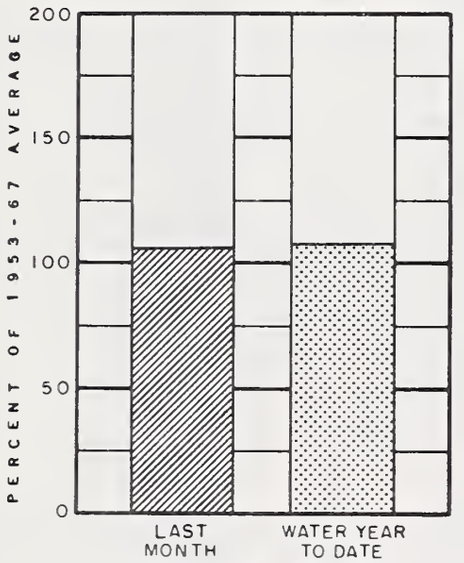
Grande Ronde at La Grande



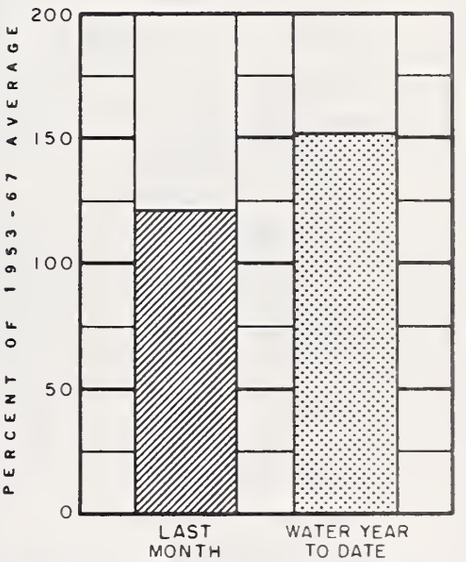
Chewaucan nr. Paisley



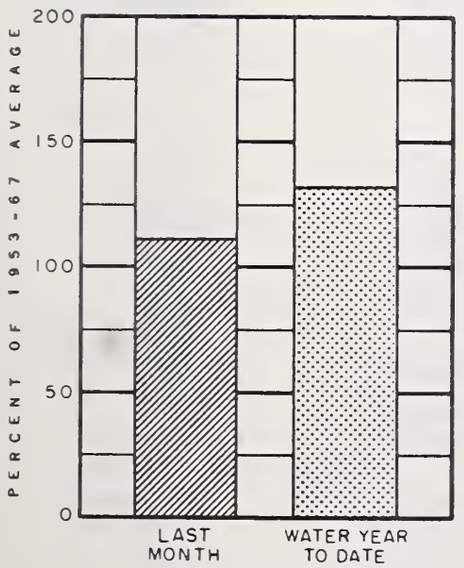
John Day at Service Creek



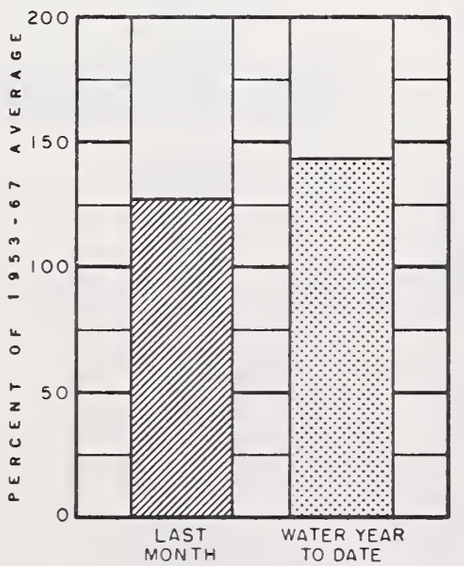
Deschutes at Moody



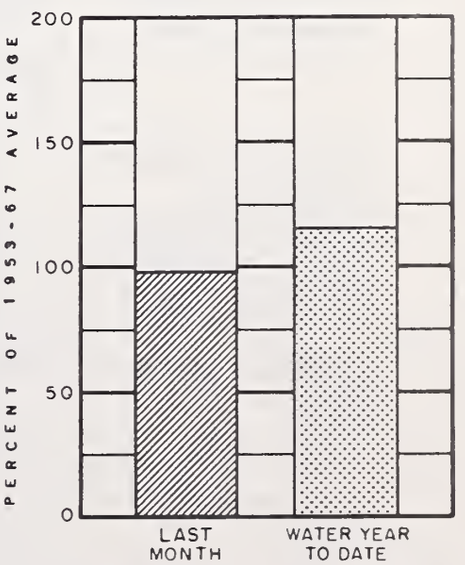
Mid. Fk. Willamette below No. Fk.



Umpqua near Elkton



Rogue at Raygold



Upper Klamath Lake net inflow

Data furnished by U.S. Geological Survey; The Pacific Power and Light Co.; and North and South Boards of Control Owyhee Project.

STATUS OF RESERVOIR STORAGE, OCTOBER 1, 1972

RESERVOIR	USABLE CAPACITY (Thous. A.F.)	THOUSANDS ACRE FEET IN STORAGE ABOUT OCT. 1 1972	1971	15-Year Average 1953-67
		UPPER COLUMBIA DRAINAGE		
Antelope	55.0	6.7	- -	6.9
Owyhee	715.0	447.2	471.3	281.9
Beulah Reservoir	60.0	14.8	15.2	8.1
Bully Creek	30.0	4.7	6.5	6.4
Warmsprings	191.0	78.0	99.6	45.6
Phillips Lake	73.5	43.0	45.9	- -
Unity	25.2	2.0	1.7	2.7
Wallowa Lake	37.5	10.7	19.4	15.4
		LOWER COLUMBIA DRAINAGE		
Cold Springs	50.0	2.6	4.1	2.6
McKay	73.8	9.2	16.8	6.1
Ochoco	47.5	24.1	26.4	15.0
Prineville	153.0	101.7	103.7	103.0
Crane Prairie	55.3	33.3	19.7	22.9
Crescent Lake	86.9	66.3	46.8	33.9
Wickiup	200.0	128.3	113.8	45.6
Cottage Grove	30.0	2.9	0.0	5.5
Cougar	155.2	76.6	85.9	- -
Detroit	299.9	175.0	198.8	193.0
Dorena	70.5	31.0	23.9	7.2
Fall Creek	115.0	29.1	20.5	- -
Fern Ridge	94.2	74.8	78.0	50.7
Foster	30.0	24.0	25.1	- -
Green Peter	270.0	108.6	125.1	- -
Hill Creek	200.0	89.2	102.2	124.7
Lookout Point	337.2	168.8	203.8	213.4
Timothy Lake	61.7	61.4	60.3	58.6
		WEST COAST DRAINAGE		
Fourmile Lake	16.1	9.0	9.0	6.7
Fish Lake	8.0	7.0	5.8	2.4
Howard Prairie	60.0	49.4	50.5	33.6
Hyatt Prairie	16.1	7.9	12.4	7.9
Emigrant Lake	39.0	6.2	7.5	9.4
Upper Klamath	584.0	394.4	448.9	307.3
Gerber	94.0	45.9	55.6	27.1
Clear Lake	440.2	284.5	284.9	168.6
Cottonwood	8.7	0.0	0.6	0.4
Drews	63.0	29.5	36.4	24.0

SOIL MOISTURE as of October 1, 1972

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average [1]
OWYHEE, MALHEUR WATERSHEDS							
Bear Creek (Nev.)	7800	72	16.8	[c]		- -	- -
Big Bend (Nev.)	6700	48	16.7	[c]		11.2	- -
Blue Mtn. Springs	5900	42	16.9	9/25	5.2	5.0	5.9
Crane Prairie	5375	48	18.2	9/27	14.5	14.7	14.6
Folly Farm	4450	30	12.5	[c]		- -	- -
Jack Creek, Lower (Nev.)	6800	48	8.6	[c]		5.1	- -
Jordan Valley	4390	48	19.3	10/3	15.9	- -	14.4
Mud Flat (Ida.)	5500	48	12.8	[c]		- -	- -
Rodeo Flat (Nev.)	6800	42	11.0	[c]		5.1	- -
Taylor Canyon (Nev.)	6200	48	15.1	[c]		7.8	- -
Triangle (Ida.)	5150	48	16.6	[c]		- -	- -
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Blue Mtn. Summit	5100	36	16.8	9/26	8.3	8.3	7.7
Dooley Mountain	5430	36	9.2	9/26	2.2	2.7	3.0
Emigrant Springs	3925	48	22.3	9/28	16.0	18.0	12.9
Ladd Summit	3730	48	18.9	9/28	9.3	9.0	8.9
Moss Springs	5850	42	25.8	9/28	12.6	11.4	- -
Tollgate	5070	48	23.6	9/29	10.9	10.8	14.4
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS							
Battle Mtn. Summit	4340	48	13.8	9/28	9.9	10.7	9.3
Emigrant Springs	3925	48	22.3	9/28	16.0	18.0	12.9
Tollgate	5070	48	23.6	9/29	10.9	10.8	14.4
UPPER JOHN DAY WATERSHEDS							
Battle Mtn. Summit	4340	48	13.8	9/28	9.9	10.7	9.3
Beech Creek	4800	48	21.3	9/27	9.3	6.8	9.8
Blue Mountain Springs	5900	42	16.9	9/27	5.2	5.0	5.9
Blue Mountain Summit	5100	36	16.8	9/26	8.3	8.3	7.7
Derr	5670	24	9.0	[c]		- -	4.1
Marks Creek	4540	36	14.1	9/28	8.8	- -	9.0
Snow Mountain	6300	48	16.7	9/29	11.1	11.5	9.7
Starr Ridge	5150	36	10.6	9/27	7.2	7.2	7.3
Williams Ranch	4500	42	17.9	9/27	14.9	14.6	14.5
UPPER DESCHUTES, CROOKED WATERSHEDS							
Derr	5670	24	9.0	[c]		- -	4.1
Marks Creek	4540	36	14.1	9/28	8.8	- -	9.0
Snow Mountain	6300	48	16.7	9/29	11.1	11.5	9.7
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS							
Cooper Spur	3490	72	26.4	9/29	6.4	6.3	- -
KLAMATH WATERSHEDS							
Quartz Mountain	5320	48	15.3	9/13	5.2	5.3	5.6
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	10/3	8.7	8.2	8.8
Quartz Mountain	5320	48	15.3	9/13	5.2	5.3	5.6
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	9/27	5.2	5.0	5.9
Fish Creek	7900	48	15.0	9/24	6.9	7.1	8.2
Folly Farm	4450	30	12.5	[c]		- -	- -
Silvies	6900	48	16.4	9/24	12.7	11.0	11.6
Snow Mountain	6300	48	16.7	9/29	11.1	11.5	9.7
Starr Ridge	5150	36	10.6	9/27	7.2	7.2	7.3
Willow-Bald	5000	24	6.6	9/29	3.6	4.2	3.4

The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE
- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY
- Douglas County Water Resources Survey

FEDERAL
- Department of Agriculture
  - Cooperative Extension Service
  - Forest Service
  - Soil Conservation Service
- Department of Commerce
  - NOAA, National Weather Service
- Department of the Interior
  - Bonneville Power Administration
  - Bureau of Land Management
  - Bureau of Reclamation
  - Fish and Wildlife Service
  - Geological Survey
  - National Park Service
- Department of National Defense
  - Corps of Army Engineers

PUBLIC UTILITIES
- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES
- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS
- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warmsprings Irrigation District

PRIVATE ORGANIZATIONS
- The Crag Rats, Hood River, Oregon

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

Return this entire sheet to above address, if you do NOT wish to receive this material ☐, or if change of address is needed ☐ (indicate changes in address below, including ZIP code).

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE

U.S. MAIL

FIRST CLASS MAIL

FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"

USDA, NATIONAL AGRICULTURAL LIBRARY
CURRENT SERIAL RECORD
BELTSVILLE, MARYLAND 20705